WO 2005/010099 PCT/KR2004/001820

Claims

1. Disposable tableware completely degradable under environmental conditions without environmental contamination, which is prepared by finely pulverizing and mixing 1-30 wt% of crop residues, 1-30 wt% of corn flour, 1-10 wt% of paper mulberry bark, 1-10 wt% of a moss and 30-96 wt% of a grain flour mixture, and compression-molding a resulting mixture to a predetermined shape and size at high temperature under high pressure.

5

- 2. The disposable tableware completely degradable under environmental conditions without environmental contamination according to claim 1, wherein the crop residues are selected from straws of rice, wheat, barley and other grain crops, chaff, bran, and mixtures thereof.
- 3. The disposable tableware completely degradable under environmental conditions without environmental contamination according to claim 1, wherein the grain flour mixture comprises 10-15 wt% of barley flour, 1-20 wt% of potato starch, 5-13 wt% of glutinous rice flour, 5-12 wt% of rice flour and 60 wt% or higher of food powder as the remaining part.
 - 4. A method of manufacturing disposable tableware

WO 2005/010099 PCT/KR2004/001820

5

10

15

20

completely degradable under environmental conditions without environmental contamination using plants and crops as main materials, comprising:

determining a composition for preparing the disposable tableware, which includes 1-30 wt% of crop residues, 1-30 wt% of corn flour, 1-10 wt% of paper mulberry bark, 1-10 wt% of a moss, and, as a remaining part, a grain flour mixture (wherein, the grain flour mixture includes 10-15 wt% of barley flour, 1-20 wt% of potato starch, 5-13 wt% of glutinous rice flour, 5-12 wt% of rice flour and, as a remaining part, 60 wt% or higher of food powder), finely pulverizing each component, and mixing pulverized components; and

compression-molding a resulting mixture in a metal mold preheated to 140-150°C and connected to a 500-ton hydraulic press to provide disposable tableware.

5. The method of manufacturing disposable tableware completely degradable under environmental conditions without environmental contamination according to claim 4, wherein the crop residues are selected from straws of rice, wheat, barley and other grain crops, chaff, bran, and mixtures thereof.